Listing of the Claims:

1. (Currently Amended) A rotary die apparatus for use with a first rotary die having a first axis of rotation and a second rotary die having a second axis of rotation parallel to the first axis of rotation comprising:

a base;

a plurality of elongate columns, each column having a first end and a second end defining a path of travel along a length thereof, the first end of each column mounted to the base in spaced relationship to one another;

at least one cross member positioned transverse to the first and second axis of rotation, each cross member movably engaged with respect to at least two of the plurality of columns for movement along the path of travel;

a first modular die support mounted directly to the base separate and independent of the plurality of columns, the first modular die support in a location spaced from the columns, the first modular die support ~~providing exclusive support~~ in sole rolling engagement with and solely maintaining the first rotary die in a stationary rotary position ~~vertically~~ upwardly, horizontally transverse to the first axis of rotation and longitudinally along the first axis of rotation with respect to the base and independent of the columns ~~through rolling engagement with the first rotary die independent of the columns~~; and

a second modular die support mounted to the cross member in a location spaced from the columns, the second modular die support adjustably loading force between the first and second rotary dies while in ~~exclusive~~ rolling, vertically downwardly pressing engagement with the second rotary die.

2. (Cancelled)

3. (Withdrawn) The apparatus of claim 1 wherein the first die is in rolling engagement with the second die.

4. (Withdrawn) The apparatus of claim 9 wherein the first rotary die further comprises a first end surface and an opposite second end surface, the first die having a radially raised flange adjacent to the first and the second end surfaces.

5. (Withdrawn) The apparatus of claim 4 wherein each of the raised flanges defines a shoulder operably engageable with the corresponding rollers of the first bearing and the second bearing of the first modular die support to limit linear longitudinal translation of the first die along the first axis of rotation.

6. (Withdrawn) The apparatus of claim 5 wherein each of the raised flanges defines a shoulder operably engageable with a corresponding end of the second die to limit linear longitudinal translation of the second die along the second axis of rotation.

7. (Withdrawn) The apparatus of claim 1 wherein the cross member further comprises a first cross member and a second cross member, the first and second cross members positioned on mutually exclusive, opposing sets of columns located in spaced relationship with respect to one another.

8. (Withdrawn) The apparatus of claim 1 further comprising a pressure member operably engaged with the cross member for selectively adjusting the position of the cross member along the path of travel.

9. (Withdrawn) The apparatus of claim 1 wherein the first and the second modular die supports each exclusively comprise a first bearing assembly and a second bearing assembly positioned in longitudinally spaced locations adjacent each end of the corresponding first and second rotary dies, each bearing having at least two rollers with axes of rotation extending substantially parallel to one another and each roller angularly spaced from one another with respect to the axis of rotation of the corresponding first and second rotary dies.

10. (Withdrawn) The apparatus of claim 1 wherein the first rotary die and the second rotary die each further comprise a first end surface and an opposite second end surface, each die having an elongate journal extending from the first and second end surfaces along the axis of rotation; and

the first and second modular die supports each further comprising a pair of cylindrical roller bearings independent of and spaced from the columns positioned along the axis of rotation, each cylindrical roller bearing operably engaged with one of the journals for permitting free rotation of the die about the axis of rotation.

11. (Withdrawn) The apparatus of claim 10 further comprising at least one spacer positioned between the first and the second modular die supports.

12. (Withdrawn) A rotary die apparatus comprising:

a frame having a base, a plurality of elongate circular columns having a first end and a second end defining a first axis of movement along a length thereof, the first ends of the columns removably mounted with respect to the base and the second ends of the columns removably mounted with respect to a cover, at least one

cross member, the cross member movably engagable with respect to at least two of the plurality of circular columns for movement along the first axis;

a first rotary die having a first axis of rotation, the first die having a first end surface and an opposite second end surface, and a raised radial flange adjacent the first and second end surfaces;

a second rotary die having a second axis of rotation positioned in substantially parallel alignment with the first axis of rotation and rollingly engaged with the first die, the second die having a first end surface and an opposite second end surface positioned axially inward of the radial flanges and operably engaged with the radial flange of the first die to limit linear translation of the second die along the second axis of rotation, the cross member positioned transverse to the second rotary die having the second axis of rotation;

a first modular die support removably mounted directly to the base in a location spaced from the columns, the first die support having a first bearing member and a second bearing member, the second bearing member separated from the first bearing member along the first axis of rotation, the first and second bearing members each having at least two rollers each roller having an axis of rotation substantially parallel to one another and angularly spaced from one another with respect to the first axis of rotation providing exclusive support vertically and horizontally transverse to the first axis of rotation through rolling engagement with the first rotary die, at least one of the first and second bearing members operably engaged with the raised radial flange to limit movement of the first rotary die longitudinally along the first axis of rotation; and

a second modular die support removably mounted directly to the cross member in a location spaced from the columns, the second die support having a first bearing and a second bearing member, the second bearing member separated from the first bearing member along the second axis of rotation, the first and second bearing

members each having at least two rollers in exclusive rolling vertical downwardly pressing engagement with the second rotary die, each roller having an axis of rotation substantially parallel to one another and angularly spaced from one another with respect to the second axis of rotation.

13. (Currently Amended) An improved rotary die apparatus for use with a first rotary die having a first axis of rotation and a second rotary die having a second axis of rotation, the second axis of rotation parallel to the first axis of rotation, the apparatus having a base, a cover opposite the base, a pair of opposing cross members positioned transverse to the first and second axis of rotation, the cross members moveable between the base and the cover, and a pressure member operably engaged with the cover and the cross members, the improvement comprising:

four elongate ~~rods~~ columns having a first end and a second end, the first end mounted to the base parallel and spaced from one another, and the second end mounted to the cover defining a length, the ~~rods~~ columns having a uniform cross section along the length between the base and the cover;

a first modular die support having a first bearing and a second bearing positioned spaced from one another with respect to the first axis of rotation, each bearing mounted directly on the base in a location spaced from the ~~rods~~ columns, each bearing having at least two rollers, each roller having an axis of rotation substantially parallel to one another and angularly spaced from one another with respect to the first axis of rotation, the rollers ~~providing exclusive support~~ in sole rolling engagement and solely maintaining the first rotary die in a stationary rotary position ~~vertically~~ upwardly, horizontally transverse to the first axis of rotation and longitudinally along the first axis of rotation with respect to the base and independent of the columns, the rollers ~~through rolling engagement with the first rotary die~~ in operable engagement with a raised radial flange on each of a first and a second end of

the first rotary die to limit linear translation of the first rotary die along the first axis of rotation ~~independent of the columns~~; and

a second modular die support having a first bearing and a second bearing positioned spaced from one another with respect to the second axis of rotation, each bearing mounted to one of the cross members spaced from the columns ~~to be rollingly engaged~~ in rolling engagement with the second rotary die.

14. (Cancelled)

15. (Currently Amended) The apparatus of claim ~~14~~ 13 wherein the second die further comprises a first end and an opposite second end positioned axially inward of the raised radial flanges, each of the first and the second ends operably engagable with the adjacent radial flange of the first die ~~along the first axis of rotation~~ to limit linear translation of the second die along the second axis of rotation.

16. (Currently Amended) The apparatus of claim 13 wherein the first and second bearing of the second modular die support comprise at least two rollers, each roller having an axis of rotation substantially parallel to one another and angularly spaced from one another with respect to the second axis of rotation, the first and the second bearings in rolling engagement with and solely maintaining the second rotary die in a stationary rotary position in a horizontal direction transverse to the second axis of rotation.

17. (Previously Presented) The apparatus of claim 13 wherein each of the first and the second bearings of the second modular die support further comprise a cylindrical roller bearing for rolling engagement with a journal on the second die.

Claims 18-35 (Cancelled)

36. (Cancelled)

37. (Withdrawn) The rotary die apparatus of claim 1 wherein the elongate columns are uniform and circular in cross section along the length.

38. (Cancelled)

39. (Withdrawn) The rotary die apparatus of claim 12 wherein the elongate columns are uniform in cross section along the length.

40. (Withdrawn) A rotary die module for use with a first rotary die having a first axis of rotation and a second opposing rotary die having a second axis of rotation, the rotary die module comprising:

a base;

four parallel elongate rods having a first end and a second end defining a first axis of movement along a length thereof, the first ends of the rods mounted to the base, the rods spaced with respect to one another defining two pair of opposing rods with one pair of rods adjacent each end of the base, the second ends of the rods mounted to a cover, the rods having a uniform cross section along the length between the cover and the base;

a pair of opposing cross members, each cross member positioned on one pair of rods and extending transverse to the first and second axis of rotation, each cross member movably engaged on the rods for movement along the first axis of movement;

a first modular die support having a first bearing and a second bearing, the second bearing positioned spaced from the first bearing with respect to the first axis of rotation, each bearing having at least two rollers, each roller having an axis of rotation substantially parallel to one another and angularly spaced from one another with respect to the first axis of rotation, each bearing attached directly to the base spaced from the columns, the first die support providing exclusive support vertically, horizontally transverse to the first axis of rotation and longitudinally along the first axis of rotation through engagement with the first rotary die, the rollers of at least one of the first and second bearings operably engaging a shoulder defined by a raised radial flange on the first rotary die to limit linear longitudinal translation of the first rotary die along the first axis of rotation;

a second modular die support having a first bearing and a second bearing, the second bearing positioned spaced from the first bearing with respect to the second axis of rotation, each bearing having at least two rollers, each roller having an axis of rotation substantially parallel to one another and angularly spaced from one another with respect to the second axis of rotation, each bearing directly attached to one of the cross members spaced from the rods to receive and rotatably engage the second rotary die; and

a pressure member engaged with the cover and the cross members for controlling movement of the second modular die support along the first axis of movement.

Claims 41-45 (Cancelled).

46. (Withdrawn) A rotary die apparatus comprising:

a base;

a lower die support bearing mounted directly to the base;

a first elongate rotary die rollingly supported on the die support bearing;

a second elongate rotary die rollingly supported with respect to the first rotary die, the first and second rotary dies having a maximum outer diameter;

a plurality of elongate columns mounted directly to the base, at least two pair of columns, each pair positioned adjacent opposite ends of the first and the second rotary die, each column of each pair of columns spaced from one another by a distance greater than the maximum outer diameter of the first and second rotary dies with sufficient clearance to allow removal and replacement of at least one of the first and second rotary dies longitudinally between one of the pairs of columns;

a cross member extending between and movably engaged with one of the pairs of columns; and

an upper die-support bearing mounted to the cross member for rolling engagement with the second rotary die.

47. (Currently Amended) A modular rotary die ~~frame~~ apparatus for use with a first rotary die having a first axis of rotation and a second rotary die having a second axis of rotation parallel to the first axis of rotation comprising:

a base;

a plurality of independent elongate ~~rods~~ columns, each rod having a first end and second end defining a path ~~to~~ of travel along a length thereof, the first end of each ~~rod~~ column mounted to the base in spaced relation to one another;

a cross member engaged with at least two of the plurality of ~~rods~~ columns for movement along the path of travel;

~~interchangeable modular die supports adaptable for low and high speed rotary die applications~~ a first modular die support interchangeable between a low speed die support operable below 600 linear feet per minute and a high speed die support operable above 600 linear feet per minute and a second modular die support

interchangeable between the low speed die support and the high speed die support, ~~adaptable for low and high speed rotary die applications, the interchangeable rotary die supports having a~~ the first modular rotary die support mounted to the base spaced from the columns in ~~exclusive~~ sole rolling engagement with the first rotary die, the first modular die support soley maintaining the first rotary die in a stationary rotary position with respect to the base independent of the columns and ~~a~~ the second modular ~~rotary~~ die support mounted to the cross member spaced from the columns in ~~exclusive~~ rolling engagement with the second rotary die to solely maintain the second rotary die in a stationary rotary position in a horizontally transverse direction with respect to the second axis of rotation independent of the columns.

48. (Withdrawn) The modular die frame of claim 47 wherein the first and the second modular die supports are adapted for low speed applications.

49. (Currently Amended) The modular die ~~frame~~ apparatus of claim 47 wherein the ~~first~~ low speed die support ~~and the second modular die supports each~~ further comprises a first bearing assembly and a second bearing assembly positioned in longitudinally spaced locations along the ~~axes~~ axis of rotation of at least one of the first and the second ~~adjacent to each end of the corresponding first and second~~ rotary dies, each of the first and the second bearings having at least two rollers with axes of rotation ~~extending~~ substantially parallel to one another and each roller angularly spaced from one another with respect to the axis of rotation of the corresponding ~~first and second~~ rotary ~~dies~~.

50. (Currently Amended) The modular die ~~frame~~ apparatus of claim 49 wherein the first rotary die further comprises a first end surface and an opposite second end surface, the first die having a radially raised flange adjacent to the first and second end surfaces, the first and the second bearing rollers operably engage the corresponding raised radial flange along the first axis of rotation to limit linear translation of the first rotary die along the first axis of rotation.

51. (Cancelled)

52. (Currently Amended) The modular die ~~frame~~ apparatus of claim 50 wherein the second rotary die includes a first end and a opposite second end positioned between and operably engaged with the raised radial flanges along the second axis of rotation to limit longitudinal translation of the second rotary die with respect to the first rotary die.

53. (Currently Amended) The modular die ~~frame~~ apparatus of claim 47 wherein the high speed die support further comprises a cylindrical roller bearing operably engaged with a journal extending from a first end and a second end of at least one of the first and the second rotary dies along the respective rotary die axis of rotation ~~interchangeable die supports are adapted for high rotary die rotational speeds.~~

54. (Currently Amended) ~~The modular die frame of claim 53~~ A modular rotary die apparatus for use with a first rotary die having a first axis of rotation and a second rotary die having a second axis of rotation parallel to the first axis of rotation comprising:

a base;

a plurality of independent elongate columns, each column having a first end and second end defining a path of travel along a length thereof, the first end of each mounted to the base in spaced relation to one another;

a cross member engaged with at least two of the plurality of columns for movement along the path of travel;

a first modular die support interchangeable between a low speed die support operable below 600 linear feet per minute and a high speed die support operable above 600 linear feet per minute and a second modular die support interchangeable between the low speed die support and the high speed die support, wherein the first and the second modular die supports are the high speed die supports.

and wherein the first rotary die and the second rotary die each further comprises a first end surface and opposite second end surface, each die having an elongate journal extending from the first and the second end surfaces along the respective axis of rotation; and

the first and the second modular die supports each further comprising a pair of cylindrical roller bearings independent from and spaced from the ~~rods~~ columns positioned along the respective axis of rotation, each cylindrical roller bearing operably engaged with one of the journals for permitting free rotation of the respective die about the respective axis of rotations.

55. (Currently Amended) A modular rotary die ~~frame~~ apparatus for use with a first rotary die having a first axis of rotation and a second rotary die having a second axis of rotation comprising:

a base;

a plurality of independent elongate ~~rods~~ columns, each ~~rod~~ column having a first end and a second end defining a path of travel along a length thereof, the first end of each ~~rod~~ column mounted to the base in spaced relation to one another;

a cross member engaged with at least two of the plurality of ~~rods~~ columns for movement along the path of travel;

~~interchangeable~~ a first modular die support mounted to the base in spaced relation to the columns and a second modular die supports mounted to the cross member in spaced relation to the columns, the first modular die support ~~for exclusively~~ solely maintaining ~~and engageably receiving~~ the first ~~and second~~ rotary dies in a stationary rotary position with respect to the base independent of the columns, the first and the second modular die supports each interchangeable between at least two rollers, each roller having an axis of rotation substantially parallel to one another about the respective rotary die axis of rotation, at least one of the rollers operably engaged with a raised radial flange on the respective rotary die and

cylindrical roller bearings operably engaged with journals extending from the respective rotary die. ~~and second die supports are interchangeable between bearing rollers operably engaged with a raised radial flange on at least one of the first and second rotary dies and cylindrical roller bearings operably engaged with journals extending from the rotary dies.~~

56. (Currently Amended) The modular rotary die ~~frame~~ apparatus of claim 55 wherein both of the first and the second modular die supports comprise one of the interchangeable bearing rollers and the cylindrical roller bearings. ~~support bearing rollers operably engaged with the raised radial flange each further comprise a first bearing and a second bearing positioned in spaced relation to the rods, each bearing having at least two rollers with axes of rotation substantially parallel to one another and each roller angularly spaced from one another with respect to the axis of rotation of the first and the second rotary dies.~~

57. (Currently Amended) ~~The modular rotary die frame of claim 55~~ A modular rotary die apparatus for use with a first rotary die having a first axis of rotation and a second rotary die having a second axis of rotation comprising:

a base;

a plurality of independent elongate columns, each column having a first end and a second end defining a path of travel along a length thereof, the first end of each column mounted to the base in spaced relation to one another;

a cross member engaged with at least two of the plurality of columns for movement along the path of travel;

a first modular die support and a second modular die support in sole rolling engagement and solely maintaining the respective first and the second rotary dies in stationary rotary positions with respect to the base, the first and the second

modular die supports each interchangeable between at least two rollers, each roller having an axis of rotation substantially parallel to one another about the respective rotary die axis of rotation, at least one roller operably engaged with a raised radial flange on the respective rotary die and cylindrical roller bearings operably engaged with journals extending from the respective rotary die, wherein the cylindrical roller bearings ~~first and the second die supports cylindrical roller bearings operably engaged with journals~~ further comprise a first bearing and a second bearing positioned in spaced relation to the ~~rods~~ columns, each bearing ~~having a cylindrical roller bearing for~~ operably engaged ~~engagement~~ with the respective journals.

58. (New) A modular rotary die apparatus for use with a first rotary die having a first axis of rotation and a second rotary die having a second axis of rotation parallel to the first axis of rotation comprising:

a base;

a plurality of elongate columns having a first end mounted to the base and a second end;

a cross member positioned opposite the base operably engaged with at least two of the columns adjacent the second ends;

a first modular die support mounted to the base spaced from the columns and a second modular die support mounted to the cross member, each modular die support including a first bearing member and a second bearing member positioned in longitudinally spaced locations along the respective rotary die axis of rotation, each bearing member including at least two rollers with axes of rotation located in angularly spaced positions with respect to and parallel to the respective rotary die axis of rotation, the first modular die support bearings in sole rolling engagement with the respective first rotary die and solely maintaining a stationary rotary position of the first rotary die with respect to the base independent of the

columns through operable engagement of at least one of the first modular die support bearing rollers with a raised radial flange on the first rotary dies.

59. (New) A modular rotary die apparatus for use with a first rotary die having a first axis of rotation and a second rotary die having a second axis of rotation parallel to the first axis of rotation comprising:

a base;

a plurality of elongate columns, each column having a first end mounted to the base in spaced relation to one another and a second end;

a cross member engaged with at least two of the plurality of columns;

a first modular die support mounted to the base and a second modular die support mounted to the cross member, the first and the second modular die supports each including a first bearing and a second bearing positioned in spaced relation to the columns and spaced in longitudinal relation from one another along the respective rotary die axis of rotation, each of the first and the second bearings including a cylindrical roller bearing spaced from the columns in sole rolling engagement with the respective first and the second rotary dies through a journal extending from each end of the respective first and second rotary die, the cylindrical roller bearings solely maintaining a stationary position of the respective first and the second rotary die with respect to the base independent of the columns.